Method and Device for Error Concealment in an Encoded Audio Signal and Method and Device for Decoding an Encoded Audio Signal

Abstract

In a method for concealing an error in an encoded audio signal a set of spectral coefficients is subdivided into at least two sub-bands (14), whereupon the sub-bands are subjected to a reverse transform (16). A specific prediction is performed (18) for each quasi time signal of a sub-band to obtain an estimated temporal representation for a sub-band of a set of spectral coefficients following the current set. A forward transform (20) of the time signal of each sub-band provides estimated spectral coefficients which can be used (28) instead of erroneous spectral coefficients of a following set of spectral coefficients, e.g. in order to conceal transmission errors. Transforming at the sub-band level provides independence from transform characteristics such as block length, window type and MDCT algorithm while at the same time preserving spectral processing for error concealment. Thus the spectral characteristics of audio signals can also be taken into account during error concealment.